

## Endemic Typhus Fever (flea-borne)

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### What is endemic typhus fever?

Endemic typhus fever is a disease caused by bacteria called *Rickettsia typhi* or bacteria called *Rickettsia felis*.

### Who gets endemic typhus fever?

Endemic typhus fever occurs worldwide, most commonly among people in contact with rats or areas where rats live. Disease also occurs among people who live near or have contact with other small mammals (such as opossums). The few cases reported in the U.S. are usually among people living in Texas and southern California.

### How is endemic typhus fever spread?

Endemic typhus fever is not directly spread from person-to-person. Disease is spread by rat fleas infected with the bacteria that cause endemic typhus fever. Rat fleas become infected when they feed on the blood of a rat with endemic typhus fever. Infected rat fleas pass infected feces while taking a blood meal from a person. People are infected when infected rat flea feces come into contact with small cuts on the skin. The bite of an infected rat flea may also spread illness to humans. Disease may also be spread in the same way by cat fleas infected with endemic typhus fever caused by *Rickettsia felis*. Cat fleas probably become infected when they feed on the blood of opossums with endemic typhus fever. It is possible that endemic typhus fever may spread by breathing in dried infected rat flea or cat flea feces.

### Could endemic typhus fever be used for bioterrorism?

No. However, *Rickettsia prowazekii*, the bacteria that causes epidemic typhus fever, is considered an agent that could be used for bioterrorism.

### What are the symptoms of endemic typhus fever?

Symptoms are similar to those of epidemic typhus fever, but are less severe. Common symptoms of endemic typhus fever include low-grade fever, mild headache, tiredness, joint pain and muscle aches. About half of people who are infected develop a flat red rash that lasts only a short period of time.

### How soon after exposure do symptoms appear?

Symptoms usually appear around 12 days after exposure, but may appear anywhere from 7 to 14 days after exposure.

### How is endemic typhus fever diagnosed and treated?

The diagnosis of endemic typhus fever is based on signs and symptoms of illness, as well as laboratory blood tests.

Endemic typhus fever is treated with antibiotics. Healthcare providers choose the antibiotic based on the patient's symptoms and the results of laboratory tests.

### Is there a vaccine for endemic typhus fever?

There is currently no commercially available vaccine for endemic typhus fever.

### Where can I get more information about endemic typhus fever?

More information about endemic typhus fever is available on the Virginia Department of Health website at [www.vdh.virginia.gov](http://www.vdh.virginia.gov) or through the Centers for Disease Control and Prevention website at [www.cdc.gov](http://www.cdc.gov).